



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

IL 980 899 447

II. SITE NAME AND LOCATION

| | | | | | |
|---|----------------|---|-----------------------|------------------------|--------------------|
| 01 SITE NAME (Legal, common, or descriptive name of site) Brown, H. JR. | | 02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER NW 1/4 of SECT 7 T-4-N, R-12-W | | | |
| 03 CITY PEH4 Township | 04 STATE IL | 05 ZIP CODE 62417 | 06 COUNTY Lawrence | 07 COUNTY CODE 101 | 08 CONG DIST 19 |
| 09 COORDINATES/ LATITUDE 38 47 55 | | LONGITUDE 087 47 24 | | Chauncey 7.5' Quad 212 | |
| 10 DIRECTIONS TO SITE (Starting from nearest public road) See Attached Map | | | | | |

III. RESPONSIBLE PARTIES

| | | | | | |
|--|----------------|--|----------------------------|--|--|
| 01 OWNER (if known) Ruth Heath | | 02 STREET (Business, mailing, residential) R. R. #3 | | | |
| 03 CITY Sumner | 04 STATE IL | 05 ZIP CODE 62466 | 06 TELEPHONE NUMBER UNK | | |
| 07 OPERATOR (if known and different from owner) H. H. Brown JR. | | 08 STREET (Business, mailing, residential) Box 219 | | | |
| 09 CITY Bridgeport | 10 STATE IL | 11 ZIP CODE 62417 | 12 TELEPHONE NUMBER UNK | | |
| 13 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL: _____ (Agency name) <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER: _____ (Specify) <input type="checkbox"/> G. UNKNOWN | | | | | |

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED: _____ MONTH DAY YEAR ☐ B. UNCONTROLLED WASTE SITE (RCRA 103 a) DATE RECEIVED: _____ MONTH DAY YEAR ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

| | | | | | |
|--|--|--|--|--|--|
| 01 ON SITE INSPECTION <input type="checkbox"/> YES DATE _____ MONTH DAY YEAR <input checked="" type="checkbox"/> NO | | 02 BY (Check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: _____ (Specify) CONTRACTOR NAME(S): _____ | | | |
| 03 SITE STATUS (Check one) <input type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input checked="" type="checkbox"/> C. UNKNOWN | | 04 YEARS OF OPERATION BEGINNING YEAR _____ ENDING YEAR _____ UNK UNKNOWN | | | |

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Oily Waste (Toxic)
Heavy Metals (Soluble/Toxic/Persistent)

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Ground Water (Population/Environment)
Surface Water (Environment)

V. PRIORITY ASSESSMENT

| | | | |
|--|--|--|--|
| 01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Inquiries) <input type="checkbox"/> A. HIGH (Inspection required promptly) <input checked="" type="checkbox"/> B. MEDIUM (Inspection required) <input type="checkbox"/> C. LOW (Inspection on EPA available basis) <input type="checkbox"/> D. NONE (No further action needed, complete current disposition form) | | | |
|--|--|--|--|

VI. INFORMATION AVAILABLE FROM

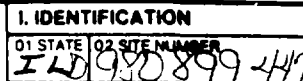
| | | | | |
|---|-----------------------------|-------------------------|---------------------------------------|---------------------------------------|
| 01 CONTACT | 02 OF (Agency/Organization) | | 03 TELEPHONE NUMBER () | |
| 04 PERSON RESPONSIBLE FOR ASSESSMENT Richard Lange | 05 AGENCY IEPA | 06 ORGANIZATION HSCS | 07 TELEPHONE NUMBER (217) 782-6760 | 08 DATE 08 28 89 MONTH DAY YEAR |

EPA FORM 2070-12 (7-81)

EPA Region 5 Records Ctr.



298576



| | | | |
|---|---|---|---|
| 01 PHYSICAL STATES (Check all that apply) | 02 WASTE QUANTITY AT SITE <i>(Measures of waste quantities must be independent)</i> | 03 WASTE CHARACTERISTICS (Check all that apply) | |
| <input checked="" type="checkbox"/> A SOLID <input type="checkbox"/> B POWDER, FINES <input checked="" type="checkbox"/> C SLUDGE <input type="checkbox"/> D OTHER _____ <i>(Specify)</i> | <input type="checkbox"/> E SLURRY <input type="checkbox"/> F LIQUID <input type="checkbox"/> G GAS TONS _____ CUBIC YARDS <u>unk</u> NO OF DRUMS _____ | <input checked="" type="checkbox"/> A TOXIC <input type="checkbox"/> B CORROSIVE <input type="checkbox"/> C RADIOACTIVE <input checked="" type="checkbox"/> D PERSISTENT <input checked="" type="checkbox"/> E SOLUBLE <input type="checkbox"/> F INFECTIOUS <input type="checkbox"/> G FLAMMABLE <input type="checkbox"/> H IGNITABLE | <input type="checkbox"/> I HIGHLY VOLATILE <input type="checkbox"/> J EXPLOSIVE <input type="checkbox"/> K REACTIVE <input type="checkbox"/> L INCOMPATIBLE <input type="checkbox"/> M NOT APPLICABLE |

| CATEGORY | SUBSTANCE NAME | 01 GROSS AMOUNT | 02 UNIT OF MEASURE | 03 COMMENTS |
|----------|-------------------------|-----------------|--------------------|-------------|
| SLU | SLUDGE | | | |
| OLW | OILY WASTE | Unk | Unk | Crude Oil |
| SOL | SOLVENTS | | | |
| PSD | PESTICIDES | | | |
| OCC | OTHER ORGANIC CHEMICALS | Unk | Unk | Brine Waste |
| IOC | INORGANIC CHEMICALS | | | |
| ACD | ACIDS | | | |
| BAS | BASES | | | |
| MES | HEAVY METALS | Unk | Unk | Brine Waste |

[illegible]

| CATEGORY | 01 FEEDSTOCK NAME | 02 CAS NUMBER | CATEGORY | 01 FEEDSTOCK NAME | 02 CAS NUMBER |
|----------|-------------------|---------------|----------|-------------------|---------------|
| FDS | | | FDS | | |
| FDS | | | FDS | | |
| FDS | | | FDS | | |
| FDS | | | FDS | | |

Federal S.I.A. # 01475



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
IL 980 899-447

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 756.2

02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Highly soluble brine waste placed for disposal in unlined lagoon. This practice has impacted private wells at similar facilities.

01 ☒ B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: Unk

02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Ground-water discharge to Surface Water/
Area subject to possible flooding.

01 ☐ C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☒ F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: Unk

02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Loss of production (Ag land) & damage to soil structure has been noted at similar sites.

(See J following) (See 05 Other following)

01 ☒ G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 756.2

02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

See A above

01 ☐ H. WORKER EXPOSURE/INJURY
03 WORKERS POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

IL 0980 899 440

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA

02 ☐ OBSERVED (DATE: _____)

☒ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

The near sterilization of soils (>5 acres), Attributed to increased soil salinity, has been noted at other similar sites.
(See F Above) (See 05 other following)

01 ☐ K. DAMAGE TO FAUNA

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION (Include name(s) of species)

01 ☐ L. CONTAMINATION OF FOOD CHAIN

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

01 ☐ N. DAMAGE TO OFFSITE PROPERTY

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

Site was infrequently inspected by regulatory agencies, Facility has now been backfilled making illegal dumping hard to detect.

06 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

Removal of soils by brines is deemed leading cause of soil erosion in several IL counties.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 756

IV. COMMENTS

Brown, H JR
Address Unreported
Bridgeport, IL 62417

Information as appears
on EPCIS (L-41)

V. SOURCES OF INFORMATION (See specific references, e.g., State files, sample analysis, reports)

S.I.A. study

EXECUTIVE SUMMARY

This site has been placed in the ERRIS data base as a result of its selection for Phase II evaluation during the federally funded Surface Impoundment Assessment (SIA) study of 1980. During ERRIS placement the operator name and business address were utilized from the SIA which results in deviations from ERRIS for actual site location, Part I section II items 02 through 08 of form 2070-12. This use of operator name and address has also led to one (1) ERRIS listing representing, in actuality, from one (1) to one hundred eight (108) actual brine pits at an equal number of separate locations.

Some considerable effort has been expended to select the site with highest, Phase II SIA, pollution potential where multiple sites are represented by a single ERRIS listing. One must keep in mind that the Phase II SIA represents no more than 7 percent of the brine pits identified in Illinois. Phase I identified more than 3200 pits where Phase II evaluated a random selection of less than 220. One must also maintain a realization that phase II pollution potential was determined by bench top study with little or no actual site visitation or monitoring.

Minimal to no file information exists on this site beyond that contained in Phases I and II of the SIA. There is no direct evidence of hazardous waste disposal at this site beyond the potentially hazardous constituents of Illinois Basin brines, but with only annual inspections by Illinois Mines and Minerals staff relevant to oil production practices and recent backfilling of most brine pits in Illinois, disposal of off site material of unknown nature is possible. A literature review and laboratory analysis of samples from two other sites indicate concern for contamination of groundwater/surface water by Sodium, Sulfate, Chloride etc. (Non-Hazardous Constituents), concern for heavy metals (i.e., Chrome, Vanadium, Barium) and long chain hydrocarbons.

A question arises as to the addressability of the heavy metals by CERCLA when one considers 40 CFR section 300.6 "Definitions - Federally Permitted Release (i)" and Section 101(10) of CERCLA. The statement "and which are reinjected" seems to allow CERCLA action, but interpretation and clarification by USEPA legal staff seems required. The long chain hydrocarbons would appear to be included in the exclusion given to crude oil and fractions thereof under 40 CFR section 300.6 "Definitions-Hazardous Substance" and 101(14) of CERCLA.

A medium priority has been assigned due to the potential impact of this site on groundwater in a rural area where private wells are generally the sole source for potable water. Similar sites have impacted private wells to a point requiring users to seek alternative sources for drinking water. A site inspection should be scheduled to verify/update owner-operator information and gain more thorough site specific information.

RML:bf/22

